

1. \ A dryer comprising:

a blower for generating an airstream,

a heater for increasing a temperature of the airstream, and an air outlet for outputting the airstream, said air outlet having a perimeter to area ratio greater than 2.5.

- 2. The dryer of claim 1 wherein said perimeter to area ratio is greater than 5
- 3. The dryer of claim 1 wherein said perimeter to area ratio is greater than 2.5 and less than

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- 4. The dryer of claim 1 wherein said perimeter to area ratio is greater than 5 and less than 7.
- 5. The dryer of claim 1 wherein said air outlet is circular.
- 6. The dryer of claim 1 wherein said air outlet has an air outlet length greater than an air outlet largest dimension.
- 7. The dryer of claim 6 wherein said air outlet is circular and has a length of about 3 to about 5 times larger than a diameter of the air outlet.

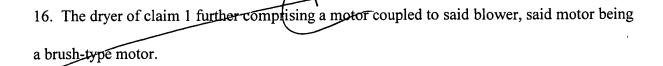
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- 8. The dryer of claim 1 further comprising a dryer housing having a rear wall for mounting said housing, said air outlet being angled towards said rear wall.
- 9. The dryer of claim 1 further comprising a second air outlet.
- 10. The dryer of claim 1 wherein said blower generates an airstream having a velocity no less than 18,000 linear feet per minute.
- 11. The dryer of claim 1 further comprising sound absorbing material to reduce sound level.
- 12. The dryer of claim 11 wherein said sound absorbing material is positioned in a sound cavity to generate a plurality of reflections off said sound absorbing material.
- 13. The dryer of claim 1 further comprising proximity sensor for detecting the presence of an object and initiating drying.

14. The dryer of claim 1 wherein said heater is located after said blower.

15. The dryer of claim 1 further comprising a motor coupled to said blower, said motor being a brushless motor.

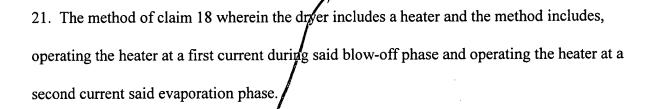
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- 17. The dryer of claim 16 further comprising a surge suppressor in series with the brush motor to reduce starting current surge and to extend brush life.
- 18. A method of operating a dryer having a blower driven by a motor, the method comprising:

initiating a blow-off phase during which said blower operates at a first speed; initiating an evaporation phase during which said blower operates at a second speed slower than said first speed.

- 19. The method of claim 18 wherein said blow-off phase has a duration of about 2 to about 3 seconds.
- 20. The method of claim 18 wherein said evaporation phase has a duration of about 8 to about 12 seconds.



- 22. The method of claim 18 wherein said blow-off phase disrupts a stagnation boundary layer on a surface.
- 23. The method of claim 18 wherein said evaporation phase promotes evaporation of water from a surface.
- 24. The method of claim 18 wherein said blower speed is controlled by a frequency of a drive signal applied to said motor.
- 25. The method/of claim 24 wherein said drive signal is generated by:

converting a first signal at a first frequency to a dc signal;

applying said dc signal to an oscillator, said oscillator generating said drive signal, said drive signal having a second frequency higher than said first frequency.

26. The method of claim 18 wherein said blower speed is controlled by gears coupling said motor and said blower.

A dryer comprising:

a blower for generating an airstream,

a heater for increasing a temperature of the airstream, and

a tubular air outlet for outputting the airstream,

at least one channel in fluid communication with said air outlet,

a heater positioned in said channel,

said airstream entraining air through said channel and past said heater.

28. A dryer comprising:

a blower for generating an airstream,

a heater for increasing a temperature of the airstream, and

an inner air outlet for outputting the airstream,

an outer air outlet surrounding the inner air outlet;

said inner air outlet including a plurality of perforations to generate a heated outer

airstream;

said outer airstream being entrained by said airstream.

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